Definitions

Abatement is a measure or a set of measures designed to eliminate lead-based paint hazards or lead-based paint permanently. Permanent is defined to have an effective life of at least 20 years.

Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt.

There are four basic methods of abatement for building components with lead-based paint.

- **Component Replacement** – is the removal of building components that contain lead-based paint. It is most appropriate for removal items such as doors, windows, trim, and cabinets.
- **Paint removal** – is the separation of paint for the substrate using safe heat, chemical, or abrasive methods. It may be done on- or off-site. Because it can create a great deal of dust, it is the most hazardous, and thus least preferable, of the approved methods and requires the greatest care and most careful cleanup. It is most appropriate for small surfaces.
- **Enclosure** – involves the installation of a barrier (such as paneling) that is mechanically attached to the building component, with all edges and seams sealed to prevent escape of lead-based paint dust. It is most appropriate for large surfaces such as walls, ceilings, floors, and exteriors.
- **Encapsulation** – involves a liquid or adhesive material that covers the component and forms a barrier that makes the lead-based paint surface inaccessible by relying upon adhesion. It is most appropriate for most kinds of smooth surfaces but it cannot be used effectively on friction surfaces, surfaces in poor condition, or surfaces that may become wet. It also must be compatible with existing paint.

  There are three basic methods for abating lead-contaminated soil.

- **Soil Removal** – is the removal of at least the top six inches of topsoil and is adequate for most projects. In areas with heavy contamination, up to two feet may have to be removed, and must be disposed of using proper waste management techniques that comply with local requirements. The maximum lead concentration in replacement soil shall not exceed 200 μg/g. Sodding or seeding of the new soil should occur. Waste disposal, site control, and weather delays can affect costs.
- **Soil Cultivation** – is the mixing of low lead soil with high lead soil, and is an appropriate method if the average lead concentration of the soil to be abated is below 1,500 μg/g. Thorough mixing is required, and pilot testing of various techniques may be needed to ensure that thorough mixing does occur. (Rototilling is often not an acceptable method of soil cultivation). Site control and weather delays can affect cost.
- **Paving** – is covering soil with high quality concrete or asphalt. Paving is common in high traffic areas but is not appropriate in play areas. The need for uncontaminated replacement soil is eliminated as are waste disposal costs. Paving often turns out to be the most economical recourse, despite its aesthetic disadvantages.

Clearance

- Involves a visual assessment and dust testing to determine if:

(a) The area is safe for unprotected workers to enter

(b) The area is a safe place for young children to live

- The visual assessment serves to check that work was completed and properly done.
- The dust testing serves to identify lead-contaminated dust. If clearance results show lead-contaminated dust above the clearance standard is present, the unit has not been adequately cleaned and places children at risk.
- If a unit fails clearance, it must be recleaned. The unit must pass clearance before it can be reoccupied.

Disclosure

- Disclosure requires most property owners of pre-1978 housing disclose the presence of lead-based paint and provide prospective buyers/tenants with all documentation on known lead-based paint and lead-based paint hazards in the dwelling unit.
- Recipients/subrecipients/award administrators must provide purchasers and lessees with information regarding any existence of lead-based paint and lead-based paint hazards prior to selling or leasing a residence.
- Sellers must allow purchasers 10 days to inspect the dwelling for lead-based paint or lead-based paint hazards.
- Violations of these disclosure requirements should be reported to the Federal Lead Clearinghouse at (800) 424-LEAD (800-424-5323).

EIBLL (Environmental Intervention Blood Lead Level)

- It is a measure of the lead level in a persons blood. A confirmed concentration of lead in whole blood equal to or greater than 20 micrograms per deciliter for a single test or 15 – 19 micrograms per deciliter for two tests taken at least 3 months apart.

Interim Controls

- Interim controls are a set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards. Interim controls include repairs, maintenance, painting, temporary containment, specialized cleaning, ongoing monitoring of lead-based paint hazards or potential hazards, and the establishment and operation of management and resident education programs.
- Unlike abatement, interim controls require periodic monitoring and reevaluation to ensure that they remain effective in preventing the creation of lead hazards.
- Even though interim controls are only a temporary solution to lead-based paint hazards, they will significantly reduce the risk of lead poisoning among housing residents.
- Interim controls can be performed as part of regular maintenance activities with limited additional effort or cost.
- Interim control methods include:

(a) Paint Stabilization – Deteriorated paint can be controlled by removing the paint, repainting the surface, or repairing loose or deteriorated substrate materials.

(b) Friction and Impact Surface Treatments – Friction and impact surfaces that create lead dust, such as windows, doors, stair treads and floors, can be treated by rehanging doors and placing

rubber stoppers along impact surfaces, and cushioning window tracks with plastic liners to reduce friction.

(c) Dust Controls – Lead-contaminated dust can be temporarily controlled by cleaning surfaces to reduce lead dust levels.

(d) Soil Treatments – Lead-contaminated soil can be controlled by limiting resident access to it. Two methods include:

- Covering contaminated surfaces with grass, mulch or other appropriate material; and
- Land use controls such as fencing or signs.

➢ An Example of Interim Controls

(a) Suppose a window is painted with lead-based paint. While the entire window is often replaced during abatement, an effective interim control would be to install plastic sash track liners. This prevents the generation of leaded dust until the window can be removed and replaced. This method is both relatively easy and inexpensive to implement.

(b) Individuals performing interim controls must be trained or certified. The new regulation gives several options for meeting the training/certification requirement.

(c) All interim control strategies require worksite preparation, cleanup, waste disposal, clearance testing, recordkeeping, and monitoring.

Lead Based Paint Inspection is a surface by surface investigation to determine the presence of lead-based paint. It includes a report that explains the results of the investigation.

Paint Stabilization

➢ Is a way to control the hazard presented by deteriorated paint.

➢ It involves removing deteriorated paint using wet methods to reduce dust, repairing loose or deteriorated substrate materials, and applying new paint. The cause of deteriorated paint must also be corrected.

➢ It helps to reduce the production of lead-contaminated dust and the accessibility of lead-contaminated paint chips. However, it is a temporary measure that requires ongoing monitoring to be successful.

Paint Testing

➢ Is a process of determining the presence or absence of lead based paint, deteriorated paint surfaced or painted surfaces to be disturbed or replaced..

➢ It is conducted with an X-ray florescence (XRF) analyzer, or through analysis of paint samples by a lead-accredited lab or a comparable testing technique.

➢ Testing must be performed by a licensed professional.

➢ The results of the paint testing must be documented in writing.

Risk Assessment

➢ Is a thorough examination of a dwelling unit or a property to identify lead-based paint hazards that are present.

➢ It involves testing of dust, soil, and deteriorated paint and includes a visual inspection for deteriorated paint and other hazardous conditions. A risk assessment also includes an investigation of the age and history of the housing and occupancy by children under age six.

- A report is written that explains the results and identifies acceptable abatement and interim control strategies based on specific conditions and the owner's capabilities for controlling identified lead-based paint hazards.
- It is performed by a certified risk assessor.

Standard Treatments

- Are a set of treatments – abatement or interim controls – that are performed routinely in housing units to address conditions that are likely to create lead-based paint hazards. Standard treatments do not require any upfront evaluation to identify existing lead-based paint hazards.
- When performing treatments the following steps are taken:

(a) Safely Repair Deteriorated Paint. This is described under "paint stabilization."

(b) Provide Smooth and Cleanable Horizontal Surfaces. For example, recoat hardwood floors with polyurethane, replace or recover worn-out linoleum floors, and cover interior window sills with metal or vinyl. Rough, pitted, and porous surfaces trap lead dust and make it difficult to clean these surfaces thoroughly. Smooth horizontal surfaces to make it possible for occupants' regular housekeeping to reduce exposure to lead dust.

(c) Correct Conditions in Which Painted Surfaces are Rubbing, Binding, or Otherwise Produce Dust. For example, rehang binding doors, install door stops to prevent doors from damaging painted surfaces, and repair and replace loose windows. By correcting conditions that cause rubbing, binding, or other damage to painted surfaces, the integrity of the paint is protected and the generation of lead dust is reduced.

(d) Cover or Restrict Access to Bare Residential Soil. For example, cover bare soil with gravel, mulch, or sod; or physically restrict access to bare soil.

(e) Specialized Cleaning. Conduct specialized cleaning of work areas using HEPA vacuums and lead-specific detergents upon completion of treatments above.

(f) Clearance. After work is completed, clearance examination must be performed in accordance with HUD clearance requirements.

Visual Assessment

- Serves to identify deteriorated paint. Because it does not involve any testing to determine the presence of lead, it is not considered a "lead hazard evaluation" method under the regulation. However, it is used in many situations as a simple method to determine whether a unit is suitable for program funding and to identify necessary repairs.
- A visual assessment is an assessment of interior and exterior surfaces for signs of paint deterioration and potential hazards. Housing Quality Standards (HQS) inspectors, or other inspectors trained to identify potential hazards, or licensed risk assessors can perform this assessment.
- The assessment is similar to the visual paint inspection performed as part of the HQS inspection with a few additional elements.
- The assessment identifies:

(a) Deteriorated Paint. Deteriorated paint creates chips and dust.

(b) Structural Problems. Leaks, rotting walls, and other structural defects may cause painted surfaces to deteriorate and create chips and dust.

(c) Evidence of Chewing on Paint Surfaces. Children may chew on otherwise intact surfaces and ingest lead-based paint.

- Individuals performing visual assessment must be trained to identify deteriorated paint.
- The inspector should pay particular attention to surfaces that are known to have lead-based paint.
- If any potential lead-based paint hazards are identified, they should be noted on the unit inspection or visual assessment report forms.
- Without paint testing or dust testing, a visual assessment can only identify conditions that may pose lead-based paint hazards because the lead content of the paint is still unknown. Generally, if surfaces have not been tested for lead-based paint, grantees should assume areas contain lead-based paint and have them safely repaired.